

REMARKS

Applicant has amended the Title as requested and has provided amendments to the claims.

The present invention is in a relatively crowded field of controlling the download of programs and the use of resources by a network system wherein a server can communicate with multiple terminals to enable where possible programs to be selected and executed by a specific terminal. The server performs the function of a transmitting apparatus to transmit programs for downloading to receiving apparatus (terminals). The server can generate receiving apparatus information indicating the use state of resources that are necessary for program execution. The status of the resources, for example, whether in a use state and the ability of the receiving apparatus to execute a program, or two or more programs can be determined by providing a judging capacity that can check the amount of unused resources and their ability to handle the demands of a particular program or programs that are being executed and/or will be executed.

The present invention provides a dynamic decision-making process that can conserve system requirements and hardware that would be necessary at the receiving apparatus while preventing any wasteful download process that cannot be utilized by the receiving apparatus even if a user is requesting the same. Information display messages can be provided to the user when the transmitting apparatus judges that the use state of resources (both used and unused) at the receiving apparatus are inadequate to satisfy the user's request.

The present invention also can judge among two or more programs that would be capable of being executed by a receiving apparatus, and either can select one of the programs or can provide an interactive interface with the user by providing characteristic information from the transmitting apparatus for presentation to the user to select between the two pieces of

characteristic information associated with the respective programs to enable the user to thereby determine which program the user wishes to utilize.

In enabling the present invention, it is necessary to go beyond the conventional listing of capabilities, characteristics or attributes of individual resources (hardware and software), at the terminal level, and in this regard, the present invention permits a subjective determination of the current active status of which resources are being used relative to their capacity and which resources are not being used and are available. As can be appreciated, depending upon the demand for resource allocation with regards to a specific program, this decision making provides a hierarchy of automatic decision-making capability to improve both the performance, efficiency and utilization of resources that has not been suggested in the prior art.

The Office Action contended that the *Sahai et al.* (U.S. Patent No. 6,594,699) was a complete anticipation of Claims 1-3, 8 and 13-14.

The *Sahai et al.* disclosure was directed to improving multimedia streaming over a network and sought to provide a server which was capable of being aware of both the client hardware and software capabilities, the client being the terminals that were available in the network. The server could broadly determine the characteristics of the transferred protocol based upon knowledge of the capacity or capability of the client. The capability of the client contemplated in this *Sahai et al.* disclosure can be seen, for example, on Column 3, lines 23-60. As can be readily determined, most of this information is of a static capability or attribute, and in one version of the *Sahai et al.* disclosure, these capabilities can be kept in a “flat file which resides on the client machine” (see Column 3, lines 64-65), and such capabilities can be sent with each URL, however, at the cost of increasing the overhead of a request for service.

A conventional graphic user interface (GUI) can also provide typical delivery properties that can be chosen by the user to enable the server to customize the streaming of the multimedia data to the client. As can be appreciated, the *Sahai et al.* reference is strong in conceptual statements, but is limited in the teachings of the specific implementation of such concepts. In this regard, the *Sahai et al.* reference does not address whether a resource is being used or not being used to determine its current state relative to the execution of a program, nor does the server make any judgment as to whether the receiving apparatus can execute the program so identified by checking the amount of unused resource that is then available.

The Office Action cited *Sahai et al.* at Column 5, lines 7-14, to purportedly show a “use state of resources” held by the receiving apparatus that was necessary for a program execution. However, the actual teaching portion of Column 5 refers to broadly the schematic of Figure 2 which prompts a user to forward the user’s stored specification or preferences. It simply defines that the capabilities of the client machine are determined and that the hardware and software configuration of the client machine can be maintained in a file, e.g., “the flat file” that could be sent. Alternatively, conventional system calls supported by conventional operating systems such as either UNIX or Windows can define the characteristics of the client machine. This teaching, however, does not anticipate nor render obvious the specific features of our present invention and apparently only discloses parameters that are unchanged during use. The *Sahai et al.* reference does not address the use/unused state of resources. The amendment to the independent claims is believed to more than adequately distinguish over the *Sahai et al.* reference.

The Office Action further contended that Claims 5-7, 10-12 and 15-17 were also anticipated over the *Sonderegger et al.* (U.S. Patent No. 5,692,129).

The Office Action asserted that the *Sonderegger et al.* reference taught the identical features of the judging means set forth in our claims in Column 21, lines 28-31. This portion of the specification is directed to a structure disclosed and illustrated in Figure 11 wherein a determination is made as to whether there are more resources to “claim,” that is, whether the particular program requires additional resources to be reserved. As noted, during a Drive mapping step 176 in Figure 10, it is described, starting on Column 20, line 59, that the querying step determines whether any additional drives are needed to be mapped by determining if a Launcher Program has addressed all the mappings listed in the drive mapping attribute for the program. The querying step also determines if there is any port capturing step necessary (for example, printer ports), and finally, in a server attaching step 182, it is determined whether any additional servers are necessary by checking the file path attribute. The claiming step 192 can claim resources necessary for the application. In implementing this procedure, the internal status information of the Launcher 50 can be examined. If, in fact, resources have already been claimed by the application being launched, a third querying step 194 is taken and, for example, in a drive mapping step, the third querying step can pass control to an error reporting step if the drive assignments already made are different from those requested in a manner that prevents any drive listed in the drive mapping attributes from being mapped.

As can be readily determined, this is a verification of the drive assignment, and the determination of an errors step is certainly not a determination of the amount of unused resources and their current status. This teaching is consistent with the broader teaching of the *Sonderegger et al.* reference that wishes to provide a modified database schema that can enable a creation, deletion and alteration of application objects in a database, the application object being an application program and its execution environment. The Application Launcher allows the user to

browse through the application objects that are available to the user and to view information currently stored in the objects.

It is the desire of the *Sonderegger et al.* reference to prevent duplication and unnecessary demands on the system administrator, and by using the Launcher Application, it is capable of updating the capability of each desktop terminal to provide the current status of available hardware and software capabilities. Again, a dynamic determination of used and unused resources available at the time of the request by a user is not taught nor suggested. Accordingly, it is respectfully submitted that the *Sonderegger et al.* reference is neither an anticipation nor a teaching of the present invention as set forth in the current claims.

Referring to Claim 7, a check script is sent from the transmitting apparatus to the receiving apparatus. The Office Action contended at Column 19, lines 38-43, that a check script reviewing means was provided. This portion of the specification, however, describes the function of a setup step 162 shown in Figure 9. This teaching simply states that a resource that is needed by a specific application can have a resource setup routine performed and that standard flags can be set for communicating with operating system process creation routines. The implementation of simply a setup program for activating a specific resource and the setting of a standard flag which can be communicated between the client terminal and the server is not a check script as defined in our claims.

Dependent Claim 16 defines that one or more pieces of resource data held by the resource data holding means are resource acquisition scripts used for acquiring resources necessary for execution of corresponding programs. Claim 16 was rejected over the *Sonderegger et al.* disclosure associated with “startup script” and “shutdown script” as defined on Column 14, lines 24-25. It is believed that the citation of these steps is based simply on the similarity in

terminology used and not on the actual substance of the actual teaching in *Sonderegger et al.*; that is, while steps 108 and 110 define and add a startup script and a shutdown script attribute, these attributes are referring to stream attribute syntax and refer respectively to scripts to be run before the application selected is executed and scripts to be run after the application terminates. Accordingly, dependent Claim 16 and its feature are not suggested by the *Sonderegger et al.* reference, nor are the claim elements set forth in the independent Claim 15 taught or suggested by any other reference of record.

Finally, Claims 4 and 9 were rejected over a combination of the *Sahai et al.* reference in view of the *Wrabetz et al.* (U.S. Patent No. 5,442,791). The above comments in the *Sahai et al.* reference are still applicable to the effect that the *Sahai et al.* reference does not disclose nor teach the technical feature of an information generating means for generating receiving apparatus information that includes current state of both used and unused resources held by the receiving apparatus that are necessary for program executions.

The *Wrabetz et al.* reference is directed to a purported hybrid resource management model that has the capability of accessing published paradigm that can be independently updated and query paradigm to allow resource allocations to be made on the latest information. While the *Wrabetz et al.* purports to be an efficient use of maintaining the updated current status of resources that are available, both within the user terminal and server and in published information across the network, it does not disclose the technical feature of determining whether the receiving apparatus can execute the program with identification by checking the amount of unused resource. The Office Action cited the teaching at Column 6, lines 21-24, which simply states that the remote execution interface can have the user determine the selection of which resources to use, or it can automatically make the selection of which resources to use. This

teaching suggests that the executable program comes first and then the resources are subsequently selected. There is no judgment step suggested as to whether a program is executable or not based on the status of unused resources.

"Thus when differences that may appear technologically minor nonetheless have a practical impact, particularly in a crowded field, the decision-maker must consider the obviousness of the new structure in this light."

Continental Can Co. USA Inc. v. Monsanto Co.,
20 USPQ 2d 1746, 1752 (Fed Cir. 1991).

In view of the crowded nature of this technical field and the aspects of managing and controlling the execution of programs over a network system, it is believed that the present invention as defined in the amended claims more than adequately distinguishes over any of the teachings in the references cited of record.

It is respectfully submitted that the present application is now in condition for allowance, and an early notification of the same is requested.

If the Examiner believes that a telephone interview will help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

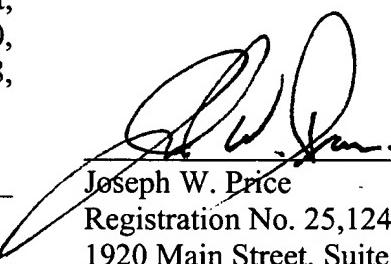
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 18, 2005.

By: Sharon Farnus

Sharon Farnus
Signature
Dated: March 18, 2005

Very truly yours,

SNELL & WILMER L.L.P.


Joseph W. Price
Registration No. 25,124
1920 Main Street, Suite 1200
Irvine, California 92614-7230
Telephone: (949) 253-4920